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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/805,904

03/15/2001

Norihito Okada

107183-00001

2924

32294

7590

02/04/2003

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EXAMINER

LUK, EMMANUEL S

ART UNIT

PAPER NUMBER

1722

DATE MAILED: 02/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/805,904

Applicant(s)

OKADA, NORIHITO

Examiner

Emmanuel S. Luk

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 November 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 15-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-12 and 15-26, drawn to a product ejecting apparatus, classified in class 425, subclass 556.
  - II. Claims 13-14, drawn to a method for ejecting a product, classified in class 264, subclass 334.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions Group II and Group I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the apparatus as claimed can be used to practice another and materially different process, such as one that does not require the first drive unit to reciprocate the first transmission drive.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Dough Goldhush on 19 November 2002, a provisional election was made with traverse to prosecute the invention of Group I,

claims 1-12 and 15-26. Affirmation of this election must be made by applicant in replying to this Office action. Claims 13-14 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 103***

5. Claims 1-8, 11, 12, 15-22, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi in view of Shimazu et al.

Yamaguchi teaches an ejector mechanism in an injection molding machine having a drive unit (30) that provides power to drive a transmission unit (33), wherein the rotation of the drive unit causes rotation of the transmission unit. An ejector member (39) to reciprocate based upon the motion of the transmission unit, the transmission and drive units are configured where the rotation of the drive unit results in rotation and reciprocation of the transmission unit, the transmission unit acts as a motion conversion unit. The movement restriction unit for restricting axial movement of the transmission unit is a stopper (40). The drive unit is controlled by a controller (42) that signals the drive unit when to rotate one direction, to stop or to reverse the direction of the rotation.

Yamaguchi fails to teach a second drive unit, second transmission unit, a reciprocating working member and controllers.

Shimazu et al teaches an apparatus having ejection pins (9) and ejector sleeves (8) and cut punches (5). The multiple pins can be operated independently from another.

Thus, it would have been obvious to one of ordinary skill in the art to have plural elements for multiplying the effects of the operations.

In regards to the controller, the independent operations of the ejectors by allowing one drive unit to operate while preventing the other to operate by the controllers would have been obvious to one of ordinary skill in the art to program the controllers for when the drives units are to operate.

It would have been obvious to one of ordinary skill in the art to modify Yamaguchi with a plurality of elements as taught by Shimazu et al because it allows for plural effect of the ejection unit.

6. Claims 9 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi in view of Shimazu et al as applied to claims 1-8, 11, 12, 15-22, 25 and 26 above, and further in view of Fujishiro et al.

Yamaguchi fails to teach a spring.

Fujishiro teaches an ejector in an injection molding machine, where spring (19) acts to limit the axial movement of the transmission device (26) as it is driven by the driving unit (54). The spring acts as a biasing means that helps limit the axial movement of the transmission device and to bias the ejectors (17) out of the cavity (23).

It would have been obvious to one of ordinary skill in the art to modify Yamaguchi with a spring as taught by Fujishiro et al because it allows quick advancing and withdrawals of the ejectors into the cavity.

7. Claims 10 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi in view of Shimazu et al as applied to claims 1-8, 11, 12, 15-22, 25 and 26 above, and further in view of Heindl et al.

Yamaguchi fails to teach brakes.

Heindl teaches an injection molding machine having a drive unit (22) that drives the rotation and reciprocation of a transmission unit (15), the transmission unit drives the reciprocation of the mobile support plate (3). Brakes (24) allows for holding the drive unit, thus holding the transmission unit in position. This in turn limits the axial movement of the transmission device.

It would have been obvious to one of ordinary skill in the art to modify Yamaguchi with brakes as taught by Heindl because it allows for limiting the axial movement of the transmission unit and thus able to hold the ejector in position.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kinoshita, Watanabe et al, Asai, Hehl and Voets.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel S. Luk whose telephone number is (703) 305-1558. The examiner can normally be reached on Monday through Friday 8 to 4.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on (703) 308-0457. The fax phone

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numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

E.L.  
January 24, 2003

  
W. L. WALKER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700